

REMARKS

Claims 13-21 have been canceled. Claims 1-12 and new Claims 22-32 are active in the case. Reconsideration is respectfully requested.

The present invention relates to a crosslinkable hotmelt adhesive.

Claim Amendments

Claim 1 has been amended in order to improve upon its readability, as well as to address matters that have been raised as objections and issues under 35 USC 112. New Claims 22 to 27 correspond to original claims 14 and 16 to 21. New Claim 28 also finds support at page 3, lines 24-27 of the text. New Claim 29 corresponds to previous Claim 15. New Claim 30 corresponds to previous Claim 21. New Claims 30 to 32 are supported by pages 3 to 5 of the text.

None of the amendments that have been made are believed to have introduced new matter into the case. Entry of the amendments into the record is respectfully requested.

Claim Objections

The issues that have been raised with respect to Claims 2 and 3 are believed to have been obviated by the amendments made to each of the claims. Entry of the amendments is respectfully requested.

Claim Rejection, 35 USC 112

The term "composition" has been eliminated from the claims. On the other hand, the phrase "double dot" has been retained as a material limitation in the claims, since it clearly has art recognized meaning in the preparation of a certain hot-melt type of adhesive. Finally,

the issue that has been raised with respect to the lower dot is believed obviated by the amendments made to the claims.

Double Patenting Rejection

Claims 1-3, 5-12, 15, 16 and 21 stand provisionally rejected based on obviousness-type double patenting over Claims 1-9, 11, 13-15, 17 and 18 of copending application Serial No. 10/575,110 in view of Hefe '064. This ground of rejection is respectfully traversed.

For the claims of the copending application to raise a question of obviousness, the copending claims would have to lead one of skill in the art to an upper/lower dot configuration in which an upper dot comprised of an amine-terminated crosslinkable copolyamide makes contact with a lower dot which specifically comprises an OH-terminated polyester, as well as several other dot components. However, to the contrary, there is not only no mention of an OH-terminated polyester in the claims as the main component of either type of dot of an upper/lower dot configuration, but a salient feature of the claims of the copending application is that both the upper and lower dots of the adhesive is the same basic material which is an amine-terminated crosslinkable copolyamide. This statement hardly leads one of skill in the art to the present invention.

While the disclosure of Hefe teaches a double dot adhesive in which a covering layer having dots comprised of a copolyamide provides the upper dots of a double dot system with lower dots being comprised of a copolyester, there is no teaching or suggestion specifically of a amine-terminated copolyamide nor a teaching of an OH group terminated copolyester. In fact, '064 discloses a hot-melt adhesive compound that is composed of a base layer that is comprised of a copolyester and low-pressure copolyethylene and a top layer that is comprised of a copolyester or copolyamide or mixtures thereof. The base layer can also comprise a dispersing agent based, for example, on polyacrylic acid. The base layer also

comprises a mixture of copolyester and a low pressure polyethylene which again hinders the diffusion rate of reactants of the two layers. Still further, the reference does not disclose the presence of an additional cross-linking agent.

Accordingly, the combined citations do not suggest the present invention as claimed and withdrawal of the rejection is respectfully requested.

Claims 1-9 and 14-20 stand rejected based on 35 USC 103 as obvious over Simon et al, U.S. Patent 6,300,413 in view of Hefe '064. This ground of rejection is respectfully traversed.

The Simon et al patent is clearly relevant to the present invention because it discloses a double dot adhesive system in which a powdered copolyamide or copolyester is mixed with a crosslinking component of an isocyanate crosslinking agent bound to a polyolefin matrix. The Example of the text of the reference well illustrates the adhesive system of the patent. A paste formulation for a base dot is described in which small amounts of a polyacrylic acid derivative and an ethoxylated fatty alcohol are mixed with a major amount of a reactive powder mixture of a polyisocyanate and an atactic μ -olefin co-terpolymer as a passivating agent for the isocyanate. The isocyanate is passivated by extruding the isocyanate into an inert polyethylene matrix, and then is finely ground again. A stable cross-linkable system was developed for the base dot. The disadvantage of the system of upper and lower dots is its complexity, which is manifested by expensive manufacture of the water-stable isocyanate, in addition to which the polyethylene matrix hinders the rate of diffusion of the isocyanate from the polyethylene matrix, thereby resulting in a decrease in the rate of reaction. On the other hand, the base dot formulation of the example on page 6 of the present specification differs in that the major component of the formulation is an acrylic polymer dispersion (PLEXTOL BV 441), while the reactive isocyanate containing powder mixture component of the base dot of the reference is the major component. Further, the isocyanate component in the present base

dot formulation is passivated by the presence of hexamethylenediamine, and not by the incorporation into a polyethylene. The upper dot compositions of both systems are an amine-terminated copolyamide. Accordingly, there is a distinctive difference between the compositions for the lower dots of the of the two adhesive systems. In fact, the cross-linkable hot melt adhesive component of the present invention is that this component only reacts when in the melt, with accompanying cross-linking.

The Hefe patent, as older technology in the field of the present invention in comparison to Simon et al, does not show or suggest upper and lower dot components as closely relevant to the compositions of the upper and lower dot formulations of the present invention as claimed. Accordingly, the reference fails to improve upon the deficiencies of Simon et al and withdrawal of the rejection is respectfully requested.

Claims 10 and 21 stand rejected based on 35 USC 103(a) as obvious over Simon et al, U.S. Patent 6,300,413 in view of Hefe '064 and further in view of Kohlhammer et al, U.S. Patent 5,977,244. This ground of rejection is respectfully traversed.

Claims 10 and 21 are directed to secondary aspects of the invention upon which patentability does not depend. Certainly, the disclosure of Kohlhammer et al does not anything to bring the disclosures of Simon et al and Hefe closer to the invention as defined in Claim 1. Accordingly, withdrawal of the rejection is respectfully requested.

Claim 11 stands rejected based on 35 USC 103(a) as obvious over Simon et al, U.S. Patent 6,300,413 and Hefe '064, further in view of Mattor et al, U.S. Patent 4,282,054. This ground of rejection is respectfully traversed.

Claim 11 is directed to a significant aspect of the invention in the use of an OH-terminated copolyester as a component of the base dot of the present adhesive system. However, the Mattor et al patent, in disclosing a coating composition for use in the preparation of a release coating and release sheet for panel pressure applications, does not

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disclose subject matter relevant to the difference between the present invention as claimed and the other references of the rejection. Accordingly, the rejection is believed overcome and withdrawal of the rejection is respectfully requested.

Claim 12 stands rejected based on 35 USC 103(a) as obvious over Simon et al, U.S. Patent 6,300,413 and Hefe '064, further in view of Hiratsuka et al, U.S. Patent 5,019,347. This ground of rejection is respectfully traversed.

The Hiratsuka et al relates to a field of technology entirely unrelated to that of the present invention, as well as of the two primary references that have been cited in the rejection. For this reason the rejection is traversed and withdrawal of the rejection is respectfully requested.

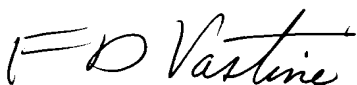
It is now believed that the application is in proper condition for allowance. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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